

3DEGREES

U.S. Voluntary Carbon Markets

PRESENTED TO:

Dairy and Livestock Subgroup #1: Fostering Markets for Non-Digester Projects

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Leader in Voluntary Carbon Projects

- + #1 supplier of voluntary offsets in the U.S. market by volume
- + 50+ new U.S. offset projects co-launched since 2004
- + 25+ active offset projects currently under long-term management
- + **Project development pipeline** across a wide range of methodologies
 - + Forestry
 - + Wetlands, grasslands, and other land use
 - + Organic waste digestion
- + **Project Developer of the Year** – Climate Action Reserve (2016)

Cost of Credit Production

- + Upfront cost of project implementation
- + Ongoing cost of project operation & maintenance
- + Costs specific to carbon credits:
 - + Monitoring: Special data collection specific to each protocol. Write reports.
 - + Verification: Hire a third-party auditor to review monitoring report, conduct site visit.
 - + Registration: List project on a recognized public registry (ACR) and pay issuance and transfer fees.
- + Note: Credit-specific costs largely fixed. Scale beneficial.

Carbon Credit Sales

+ Compliance vs. Voluntary Markets

- + Compliance: commoditized, easy to sell. Market sets the price.
- + Voluntary: customized, hard to find buyers. Price negotiated every time.
- + Total U.S. voluntary market: estimated at roughly 10M tons and \$30M annually

+ Contract structures: Emission Reduction Purchase Agmt (“ERPA”)

- + Payment upon issuance/delivery (very common) – fixed or floating price
- + Prepayment (uncommon) – full or partial payment in advance of delivery
- + Option (uncommon) – sell someone the right (but not obligation) to purchase in the future

U.S. Voluntary Price Dynamics

- + Widely variable, deal-by-deal negotiated pricing
- + “Generic” U.S. credits selling for ~\$1
- + “Charismatic” U.S. credits sell for \$3-7 (but some outliers too)
- + California market acts as a price ceiling?
- + International competition